

Three years of Transients with Fermi GBM

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The Gamma-ray Burst Monitor (GBM) is an all-sky monitoring instrument, sensitive between 8 keV and 40 MeV, with a primary objective of supporting the Large Area Telescope (LAT) in observations of Gamma-Ray Bursts (GRBs). Both instruments are part of the Fermi Gamma-ray Space Telescope. Together, the GBM and LAT instruments have provided ground-breaking measurements of GRBs that have, after 10 years of focus on GRB afterglows, inspired renewed interest in the prompt emission phase of GRBs and the physical mechanisms that fuel them. In addition to GRB science, GBM has made significant contributions to the astrophysics of galactic transient sources including long-term variations in the Crab nebula, spin state transitions in accretion powered pulsars, state transitions in black hole X-ray binaries, and unprecedented time-resolved spectral studies of soft gamma-ray repeater bursts. Closer to home, GBM also contributes to solar flare and terrestrial gamma flash science.